1. The measures of the four interior angles of a quadrilateral are x, $2x$, $x+20$ and $x+40$ degrees. How many degrees are in the measure of the smallest interior angle of the quadrilateral?

1. _____

2. A recipe that makes 48 cookies calls for $2\frac{1}{4}$ cups of flour. A 5 pound bag of flour contains 20 cups. How many pounds of flour are needed to make 960 cookies? Express your answer as a decimal to the nearest hundredth.

2. _____

3. An 8 by 8 checkerboard has alternating black and white squares. How many distinct squares, with sides on the grid lines of the checkerboard (horizontal and vertical) and containing at least 4 black squares, can be drawn on the checkerboard?

3. _____
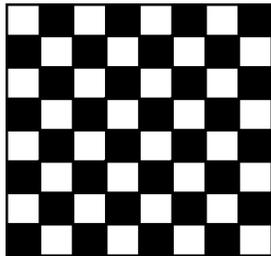
4. Monika and Marcelo's family owns two lawnmowers; a riding mower and a push mower. A person using the riding mower can completely mow the family's yard in 45 minutes. A person using the push mower can completely mow the yard in 105 minutes. If Monika uses the riding mower and Marcelo uses the push mower, how many minutes will it take to complete the job working together? Express your answer as a decimal to the nearest tenth.

4. _____

5. How many positive, even three-digit numbers exist such that the sum of the hundreds digit and the tens digit equals the units digit?

5. _____

6. Ten dozen plants are placed in a 25 square foot region. What is the mean (average) number of square inches per plant?

6. _____

7. How many zeros are at the end of (100!)(200!)(300!) when multiplied out?

7. _____

8. For each of these five Florida cities, Ann calculated the positive difference between Normal Rainfall and Observed Rainfall. What is the value, in inches, of the median of these five positive differences? Express your answer as a decimal to the nearest hundredth.
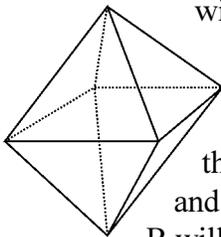
8. _____

City	Normal (inches)	Observed (inches)
Jacksonville	122.35	93.65
Miami	129.20	144.24
Orlando	112.25	91.98
Tallahassee	161.18	110.81
Tampa	102.29	76.10

9. The perimeter of a rectangle is 34 inches, and its area is 60 square inches. What is the product of the lengths of the diagonals, in square inches?

9. _____

10. An octahedron consists of two square-based pyramids glued together along their square bases to form a polyhedron with eight faces. Imagine an ant that begins at the top vertex and walks to one of the four adjacent vertices that he randomly selects and calls vertex A. From vertex A, he will then walk to one of the four adjacent vertices that he randomly selects and calls vertex B. What is the probability that vertex B will be the bottom vertex? Express your answer as a common fraction.

10. _____